

CLAIMS

5 What is claimed is:

1. A method of operating an electro-pneumatic paintball gun, comprising:
operating a firing valve by continuously supplying compressed gas of a selected pressure
to a first surface area of the firing valve and by selectively supplying compressed gas of the
selected pressure to a second surface area of the firing valve, wherein the second surface area is
10 larger than the first surface area; and
closing a bolt by supplying compressed gas of the selected pressure to a rearward surface
area of the bolt.

2. A method according to claim 1, wherein selectively supplying compressed gas of
15 the selected pressure to a second surface area of the firing valve comprises supplying
compressed gas to the second surface area through an electro-pneumatic valve.

3. A method according to claim 1, further comprising opening the bolt by
continuously supplying compressed gas of the selected pressure to a forward surface area of the
20 bolt, and by releasing the compressed gas supplied to the rearward surface area of the bolt.

4. A method according to claim 3, wherein the rearward surface area of the bolt is
larger than the forward surface area of the bolt.

25 5. A method according to claim 1, wherein the first surface area of the firing valve
is a rearward surface area, and wherein supplying compressed gas to the first surface area of the
firing valve causes the firing valve to close.

30 6. An in-line pneumatic assembly for a paintball gun, comprising:
a gas storage area configured to receive compressed gas from a regulated gas supply;
a valve comprising a first surface area and a second surface area, wherein the first
surface area is smaller than the second surface area, wherein the first surface area is configured
to receive a substantially constant supply of compressed gas, and wherein the second surface

area is configured to selectively receive compressed gas of the same pressure to actuate the valve; and

a bolt configured to slide between a forward and a rearward position and to transmit compressed gas from the compressed gas storage area when the valve is actuated.

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7. An in-line pneumatic assembly according to claim 6, wherein the bolt is configured to be arranged in the forward position before the valve is actuated.

8. An in-line pneumatic assembly according to claim 6, wherein the in-line
10 pneumatic assembly is configured to be arranged in a single longitudinally disposed chamber of a paintball gun.

9. An in-line pneumatic assembly according to claim 6, wherein the bolt and the valve are arranged along substantially the same longitudinal axis.

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10. An in-line pneumatic assembly according to claim 6, wherein the gas storage area is arranged in a gas storage area housing, wherein the valve is slidably retained in a valve retainer, wherein the bolt is slidably mounted in a bolt cylinder, and wherein the valve retainer, the gas storage area housing, and the bolt cylinder are connected together end to end to form a
20 substantially contiguous assembly housing.